

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMME United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/734,317	12/12/2003	Michael S. Ray	DP-311311	1368
22851 DELPHI TECH	7590 02/15/2008 PHI TECHNOLOGIES, INC.		EXAMINER	
M/C 480-410-202			AN, SHAWN S	
PO BOX 5052 TROY, MI 48007			ART UNIT	PAPER NUMBER
			2621	
	•		MAIL DATE	DELIVERY MODE
			02/15/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
	10/734,317	RAY ET AL.				
Office Action Summary	Examiner	Art Unit				
	Shawn S. An	2621				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING D/ Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period v Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 16 N	<u>ovember 2007</u> .					
, <u> </u>	, —					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 45	53 O.G. 213.				
Disposition of Claims						
4) Claim(s) 1-10 is/are pending in the application. 4a) Of the above claim(s) is/are withdray 5) Claim(s) is/are allowed. 6) Claim(s) 1-7,9 and 10 is/are rejected. 7) Claim(s) 8 is/are objected to. 8) Claim(s) are subject to restriction and/o	vn from consideration.					
Application Papers		·				
9) The specification is objected to by the Examine 10) The drawing(s) filed on 12 December 2003 is/a Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Ex	re: a) \square accepted or b) \square object drawing(s) be held in abeyance. See ion is required if the drawing(s) is object.	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).				
Priority under 35 U.S.C. § 119						
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 						
Attachment(s) 1) Notice of References Cited (PTO-892)	4) 🔲 Interview Summary	(PTO-413)				
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	nte				

Application/Control Number:

10/734,317 Art Unit: 2621

DETAILED ACTION

Response to Amendment

1. As per Applicant's instructions as filed on 11/16/07, claim 1 has been amended.

Response to Remarks

2. Applicants' arguments with respect to amended claim 1 have been carefully considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schofield et al (5,670,935) in view of Mori et al (5,660,454).

Regarding claim 1, Schofield et al discloses an apparatus for displaying a video image of a scene in a travel path of a vehicle, comprising:

a video camera device (Fig. 1, 14, 16) and lens (inherency emphasized) for imaging a field of view including said travel path, the field of view including out-of-path objects that are out of the travel path as well as in-path objects that are in said travel path (see Fig. 1);

a video display device (Fig. 3, 20) for displaying the imaged field of view (42); and

means for providing a reticle on said video display device for visually delineating (Fig. 3, 50, 52) an in-path portion of the field of view in which said in-path objects are

displayed (Fig. 3, 48) from an out-of-path portion of the field of view in which the out-of-path objects are displayed (Fig. 3, 44, 46; col. 5, lines 48-67; col. 6, lines 1-12).

Schofield et al does not particularly disclose <u>a first light transmissivity and a second light transmissivity perceptibly different from the first light transmissivity.</u>

However, Mori et al teaches an apparatus/method for controlling light distribution of light source (headlamp) in/on a vehicle for obtaining an optimum light distribution for a field of view of the driver (abs.).

Therefore, it would have been considered obvious to a person of ordinary skill in the relevant art employing an apparatus for displaying a video image of a scene in a travel path of a vehicle as taught by Schofield et al to incorporate Mori et al's teachings as above so as to provide a reticle on the video display device for visually delineating an in-path portion of the field of view in which said in-path objects are displayed with a first light transmissivity from an out-of-path portion of the field of view in which the out-of-path objects are displayed with a second light transmissivity perceptibly different from the first light transmissivity for obtaining an optimum desired light distribution for a specific field of view of the driver.

Regarding claim 2, Schofield et al discloses the delineated in-path portion of the displayed field of view being conical or frustro-conical (48).

Regarding claim 3, Schofield et al discloses the delineated in-path portion of the displayed field of view is conical or frustro-conical (48), and said reticle includes one or more stadia lines (see also 48, lines indicating estimation of an object's range from the vehicle) traversing the in-path portion for aiding estimation of an object's range from the vehicle.

Regarding claim 4, Schofield et al discloses stadia lines having <u>a width</u> that corresponds to a width of the vehicle (48).

Therefore, it would have been considered obvious to modify stadia lines such that the stadia lines have <u>a length</u> that corresponds to a width of the vehicle just as long as the desired result is substantially the same.

Application/Control Number:

10/734,317 Art Unit: 2621

Regarding claim 5, Schofield et al discloses the delineated in-path portion of the displayed field of view being wider than the length of the stadia lines (48).

Regarding claim 6, Schofield et al discloses a series of successively receding stadia lines in the delineated in-path portion of the displayed field of view corresponding to successively longer ranges from said vehicle (48; shorter the receding line, longer the range).

5. Claims 7 and 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schofield et al and Mori et al as applied to claim 1 above, and further in view of Chin et al (5,673,143).

Regarding claim 7, Schofield et al and Mori et al as do not particularly disclose a reticle substrate disposed between the video camera device and the lens, and a reticle array formed on the reticle substrate such that the imaged and displayed field of view includes an image of the reticle array, the reticle being defined by such image of such reticle array.

However, Chin et al teaches an imaging device comprising a reticle substrate (aiming reticle) being used with the video camera (imaging) device and the lens, and a reticle array (stadia lines) formed on the reticle substrate such that the imaged and displayed field of view includes an image of the reticle array (dual set of stadia lines; one for use with the add-on telescopic lens), the reticle being defined by such image of such reticle array as an efficient means to estimate an object's range (col. 2, lines 32-54).

Therefore, it would have been considered obvious to a person of ordinary skill in the relevant art employing an apparatus for displaying a video image as taught by Schofield et al to incorporate the Chin's teachings as above so that the reticle substrate is disposed between the video camera device and the lens, and the reticle array is formed on the reticle substrate such that the imaged and displayed field of view includes an image of the reticle array, the reticle being defined by such image of such reticle array as an efficient means to estimate an object's range.

10/734,317 Art Unit: 2621

Regarding claim 9, Schofield et al discloses in-path portion of the displayed field of view being conical or frustro-conical (48), and the reticle includes one or more stadia lines (see also 48, lines indicating estimation of an object's range from the vehicle) traversing the conical or frustro-conical region for aiding estimation of an object's range from the vehicle.

Regarding claim 10, it is considered an obvious design choice for the reticle substrate to be a cover of said video camera device, since the reticle substrate is disposed between the video camera devise and the lens.

Allowable Subject Matter

6. Claim 8 is objected to as being dependent upon rejected base claim 1, but would be allowable:

if claim 8 is rewritten in independent form including all of the limitations of the base claim 1 and any intervening claims.

Dependent claim 8 recites novel features comprising the reticle substrate being optically transparent, and the reticle array including a conical or frustro-conical region of substantially un-attenuated light transmissivity corresponding to the in-path portion of the displayed field of view, and a region of perceptibly attenuated light transmissivity corresponding to the out-of-path portion of the displayed field of view.

The prior art of record fails to anticipate or make obvious the novel features.

Accordingly, if the amendments are made to the claims listed above, and if rejected claims are canceled, the application would be placed in condition for allowance.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed

10/734,317 Art Unit: 2621

within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

- 8. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to *Shawn S. An* whose telephone number is *571-272-7324*.
- 9. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).
- 10. The fax phone number for the organization where this application or proceeding is assigned is *571-273-8300*.

SHAWN AN PRIMARY EXAMINER

2/10/08